

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (Canceled)
2. (Original) An angle sensor comprising: a cylindrical magnet fixed to a rotational member and rotating with the rotation of the rotational member; and a magnetoelectric conversion element disposed in magnetic field generated by the magnet and outputting an electric signal corresponding to the magnetic field; wherein a magnetic flux density distribution correction portion is formed on an outer circumferential surface of the magnet.
3. (New) An angle sensor according to Claim 2, wherein the magnetic flux density distribution correction portion is shaped as a rectangular groove in a sectional view along a rotational axis.
4. (New) An angle sensor according to Claim 2, wherein the magnetic flux density correction portion is shaped as a semi-circular groove in a sectional view along a rotational axis.
5. (New) An angle sensor according to Claim 2, wherein the magnetic flux density distribution correction portion is shaped as a V groove in a sectional view along a rotational axis.
6. (New) An angle sensor according to Claim 2, wherein cylindrical yokes are fixed on both side portions of a cylindrical permanent magnet.

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7. (New) An angle sensor according to Claim 2, wherein the magnetoelectric conversion element is disposed at a center of rotation axis.